

# RECLAMATION

## *Managing Water in the West*

### MT DROUGHT ADVISORY COMMITTEE MEETING

### RESERVOIR AND RIVER OPERATIONS

June 16, 2005



U.S. Department of the Interior  
Bureau of Reclamation

# Lima Reservoir

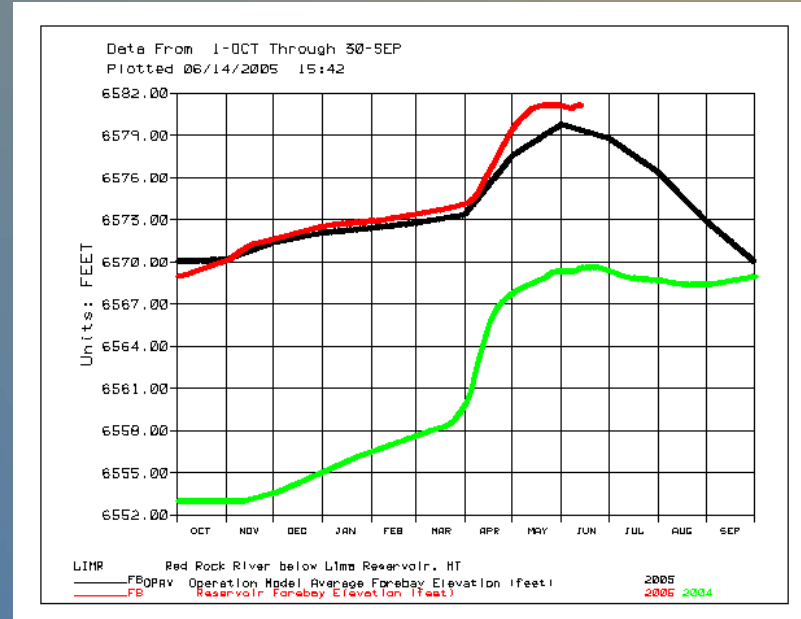
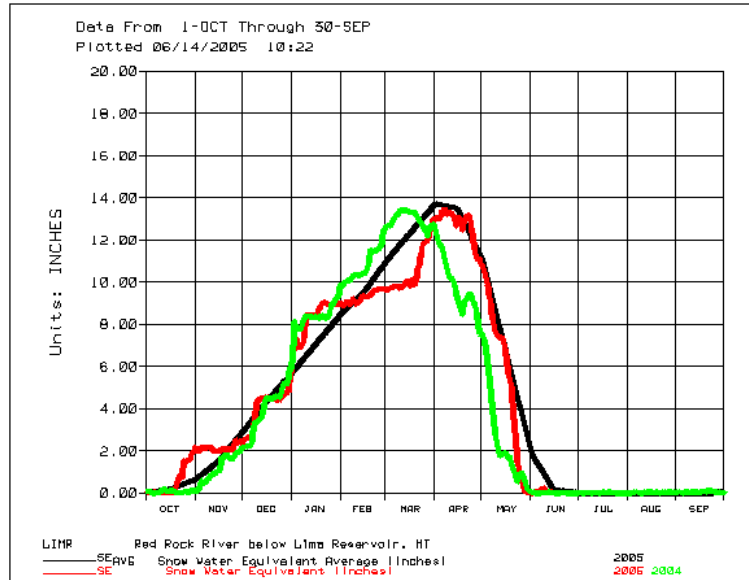
Mountain snowmelt is essentially over

May inflow was 88% of average

Storage is at 74,545 af (110% of average) & about 1.5 feet below full pool

Releases are being maintained at 400-500 cfs to meet irrigation demands & control runoff

Return flows are picking up, allowing inflows to Clark Canyon to increase



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# Clark Canyon Reservoir

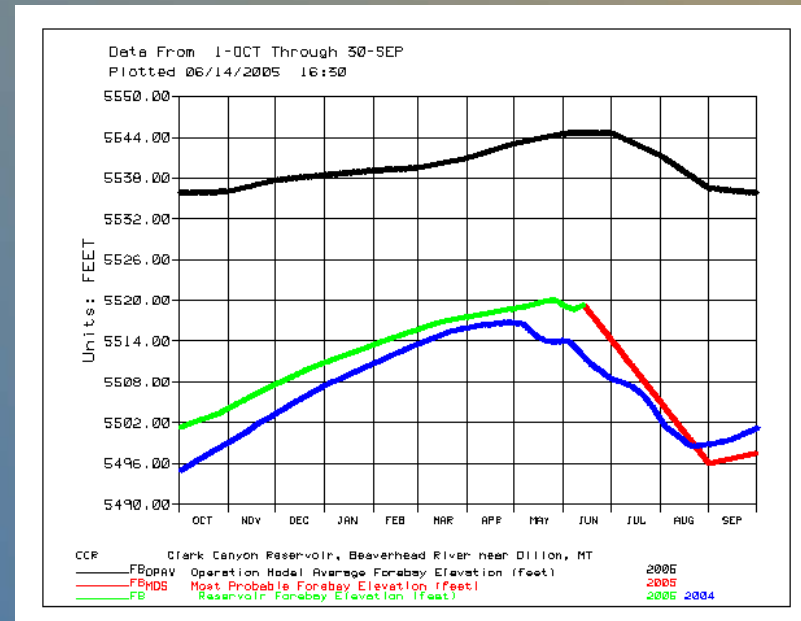
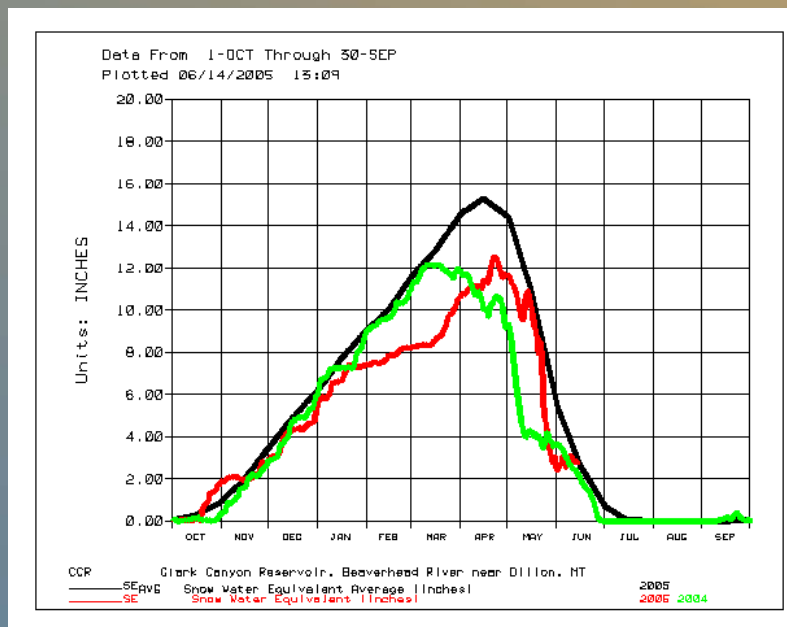
Mountain snowmelt is essentially over

May inflow was 21% of average & the 7th lowest of record

Storage is at 64,488 af (39% of average)

Releases continue to be maintained at 55 cfs

EBID & CCWSC have worked out an arrangement to deliver a limited amount of water to EBID during 2005 and this may be increased because of the recent rains



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# Hebgen Reservoir (PPL-MT)

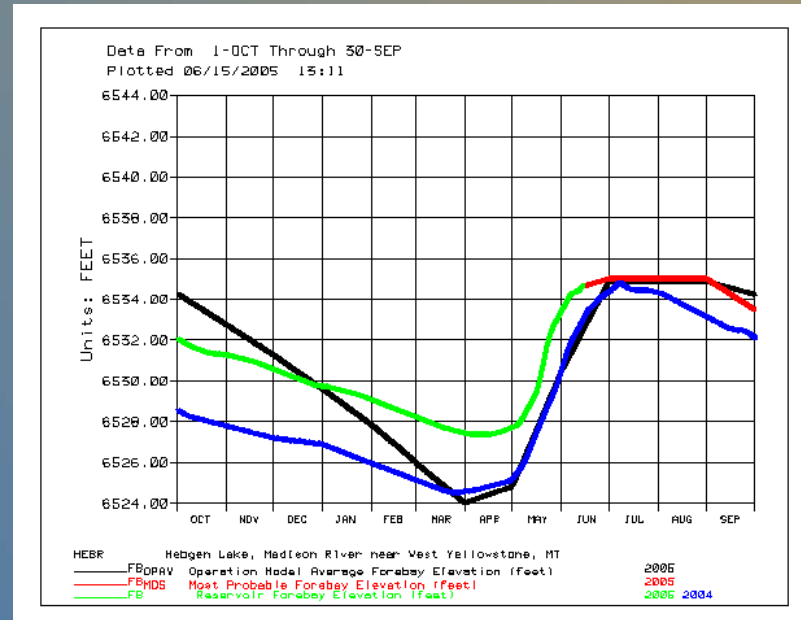
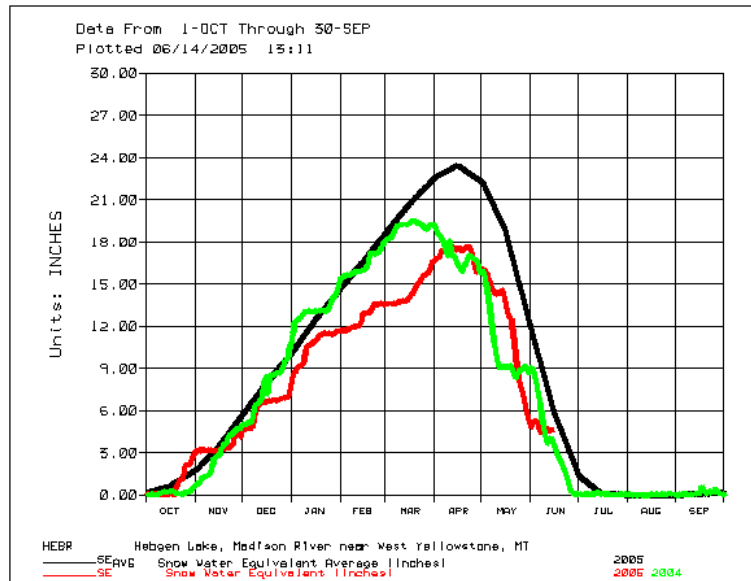
Mountain snowmelt is essentially over

May inflow was 101% of average

Storage is at 107% of average

Currently releasing 1,950 cfs to Madison River

Depending on water temperatures in the river and pulse flow operations, plans may be expected to follow last years operations



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# Canyon Ferry Reservoir

Mountain snowmelt is essentially over

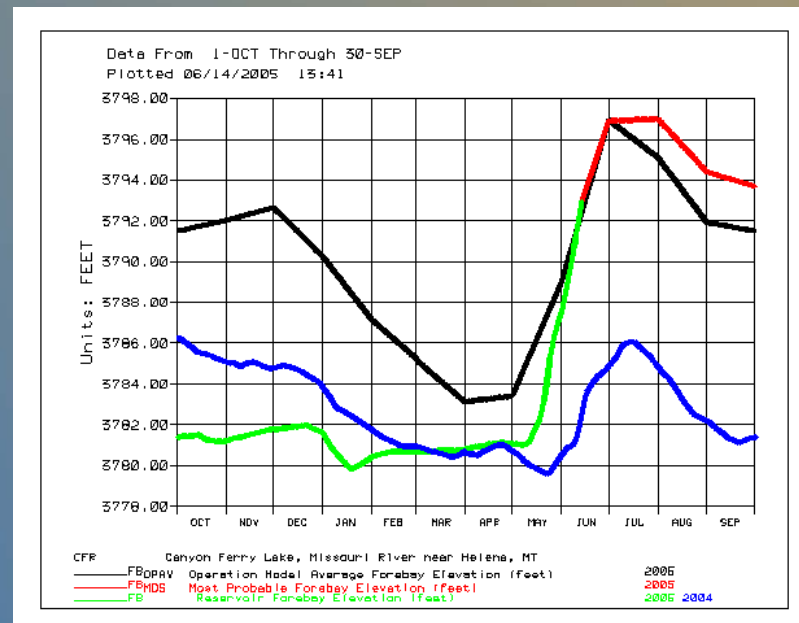
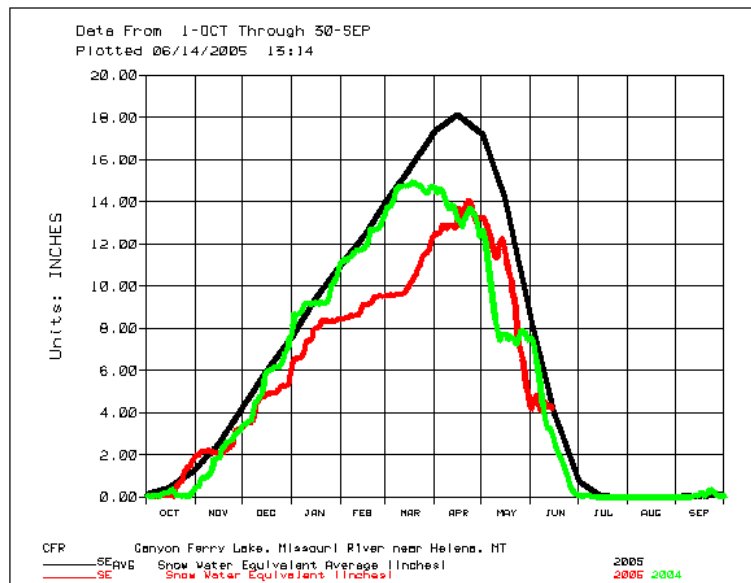
May inflow was 65% of average, the

Storage is at 92% of average

Releases to the Missouri River are being gradually increased to full turbine capacity of about 5,800 cfs during June 17-19

Storage is expected to reach the top of the joint-use pool by end of June

Hope to increase river releases later this summer.



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# Gibson Reservoir

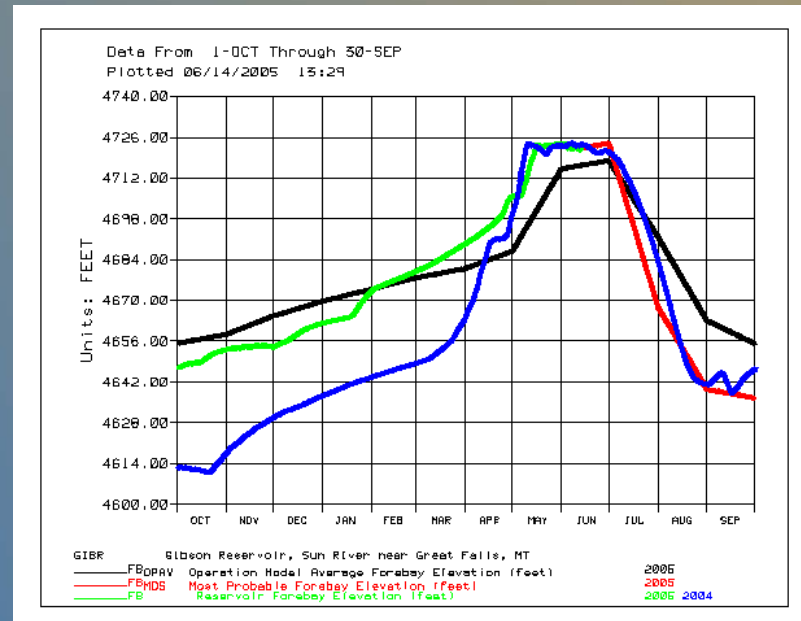
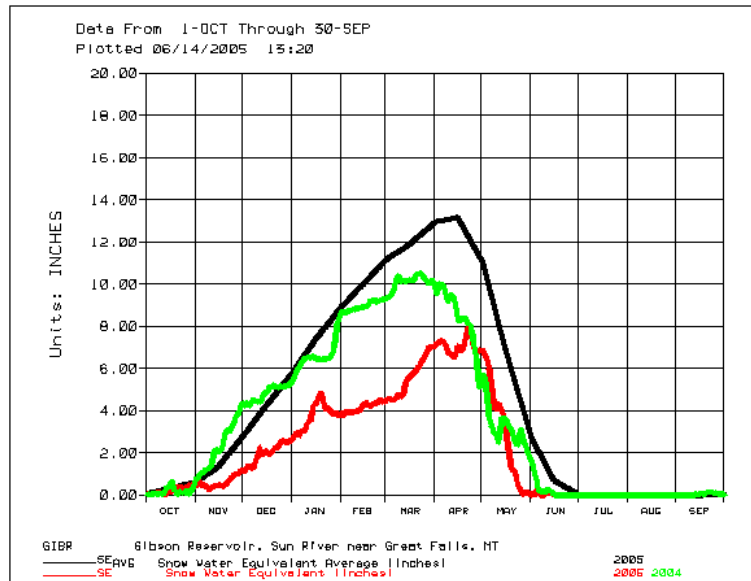
Mountain snowmelt runoff is essentially over

May inflow was 68% of average

Storage is at 109% of average

Releasing 620 cfs to Sun River and 450 cfs to the canal

Gibson Reservoir has filled and is expected to remain full through much of June; If drought conditions return, water users may experience minor water shortages in 2005



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# Lake Elwell (Tiber Reservoir)

Mountain snowmelt is essentially over

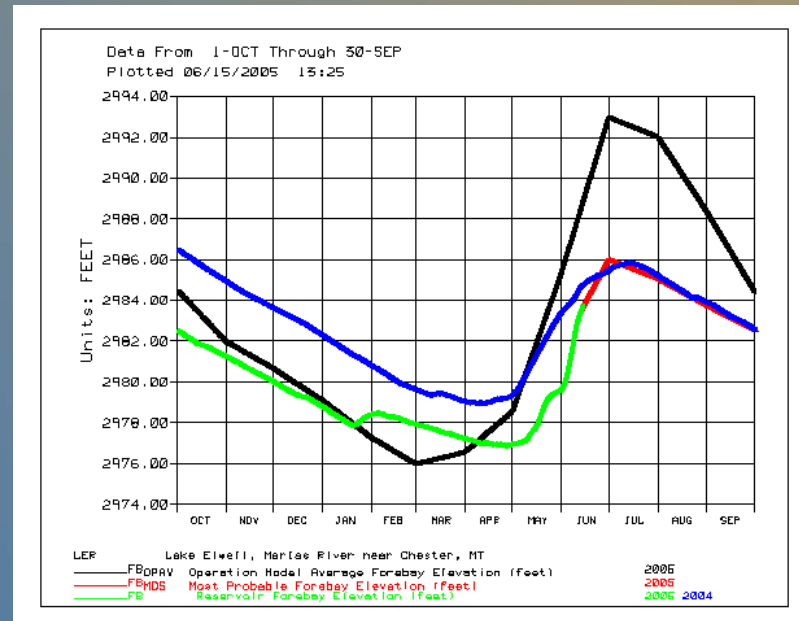
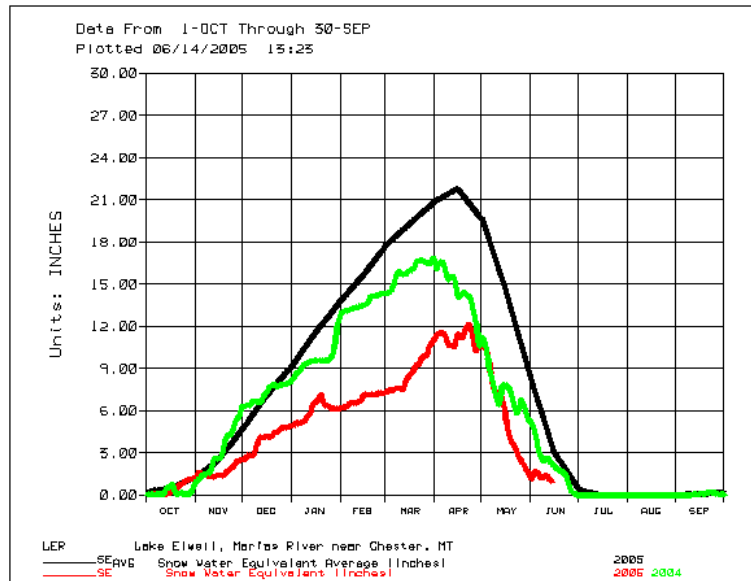
May inflow was 46% of average and the 3<sup>rd</sup> lowest of record

Storage is 91% of average

Releases have currently been reduced to 400 cfs to conserve storage for later use

Expect to fill Tiber to within 7-8 feet of normal full pool in June

May hold fall & winter releases at 400 cfs



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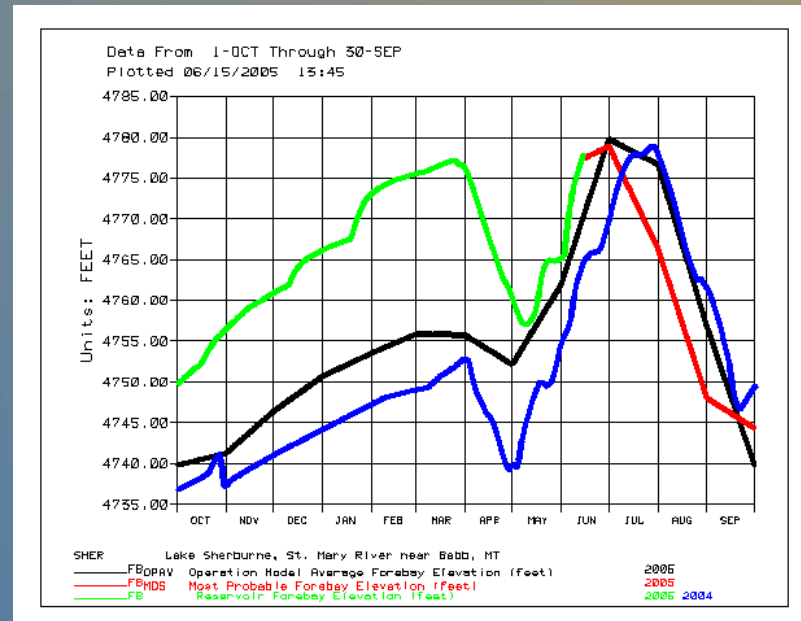
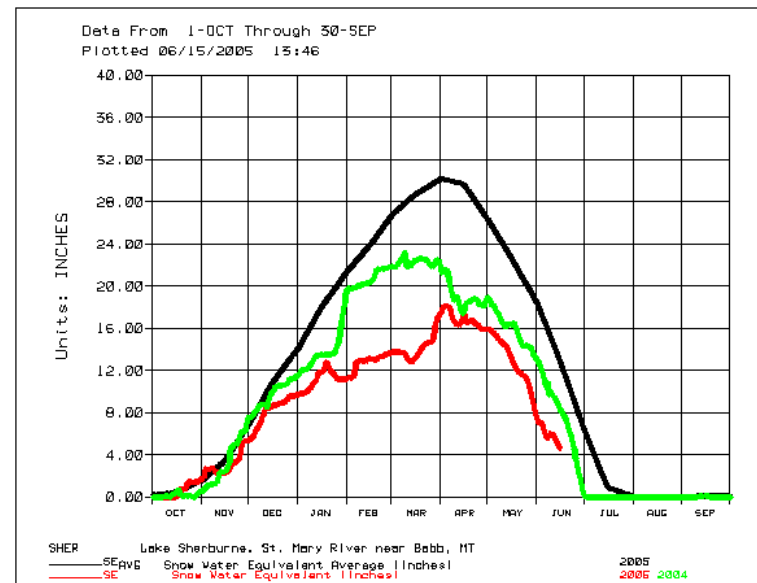
# Lake Sherburne

Mountain snowmelt is nearly over

May inflow has 71% of average and is the 3<sup>rd</sup> lowest of record

Storage is at 125 percent of average

Currently diverting water from St. Mary River Basin to Milk River at a rate of 600 cfs



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# Fresno Reservoir

Snowmelt is essentially over

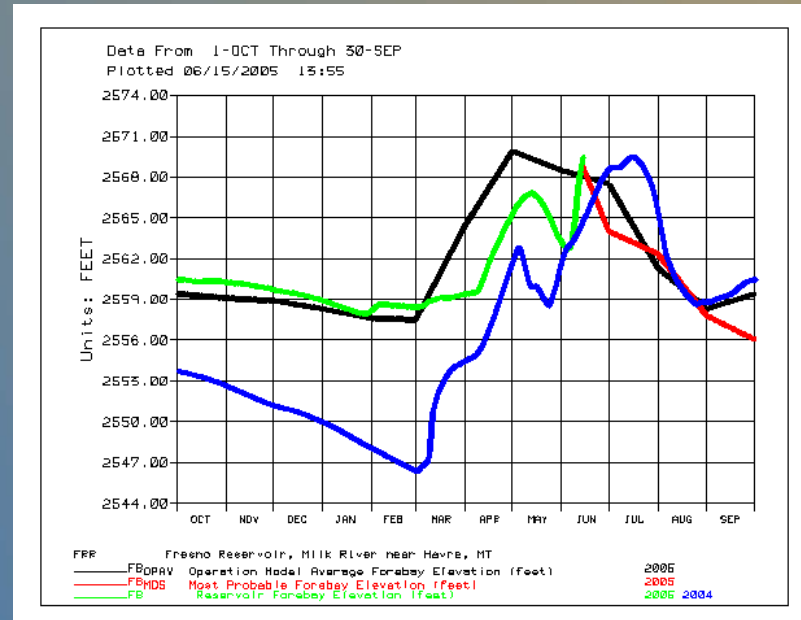
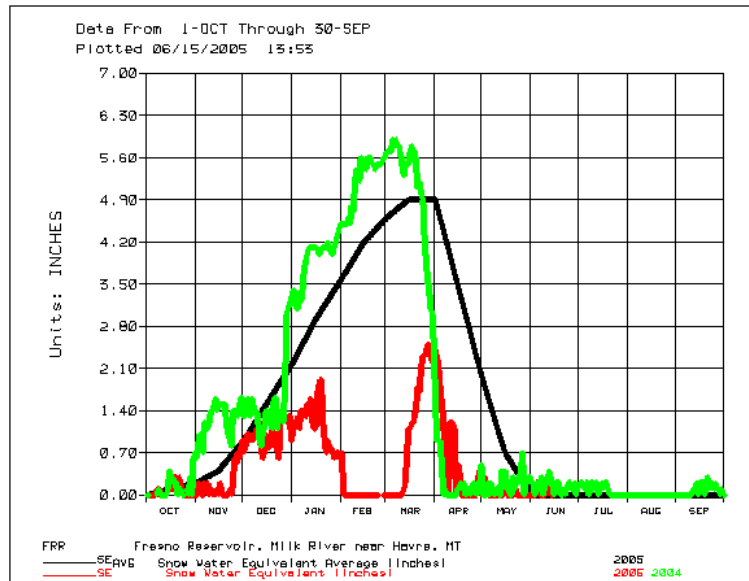
Currently diverting 600 cfs from  
St. Mary Basin to Milk River

Storage is at 108% of average

Irrigation season has slowed a  
bit; currently releasing 110 cfs to  
meet downstream demands

Storage expected to reach 3-4  
feet from the top of the  
conservation pool at elevation  
2575, irrigators may still  
experience minor water  
shortages this year

Recent rains may allow for  
irrigation allotments to be  
increased above 1.3 af/ac



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# Bighorn Lake (Yellowtail Reservoir)

Mountain snowmelt is essentially over

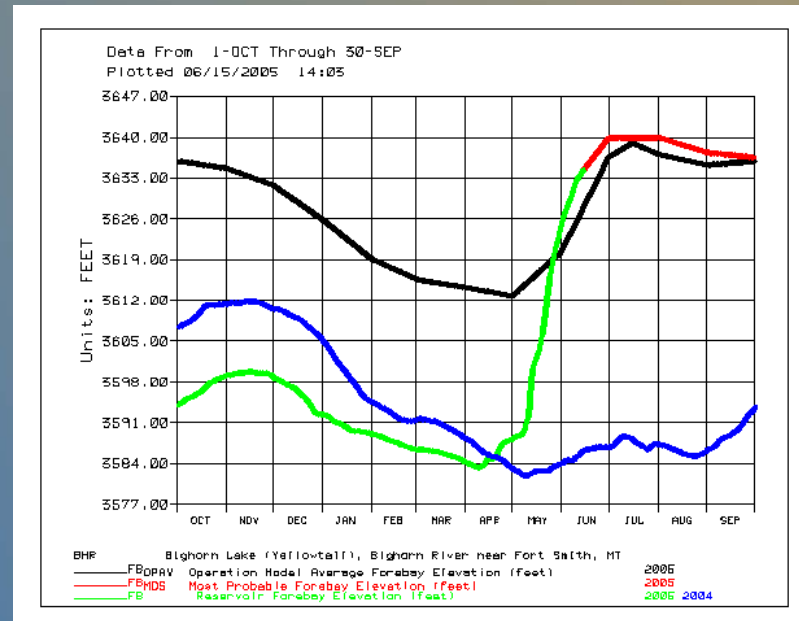
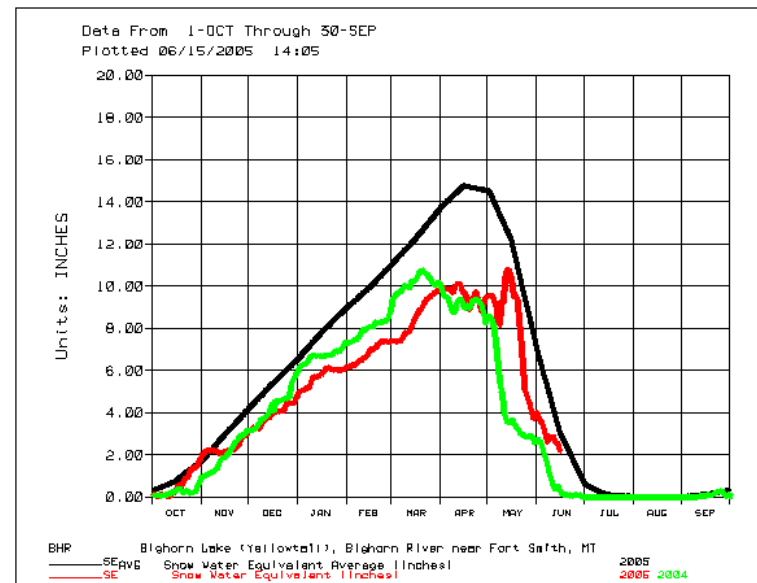
May inflow was 124% of average 11<sup>th</sup> highest of record

Storage is at 107% of average

Releases to the Bighorn River have been increased to 4,100 cfs

Bighorn Lake is expected to reach the top of the joint-use pool by the end of June or early July

Hopeful that releases will be maintained above 2,500 cfs for the remainder of the year



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# Hungry Horse Reservoir

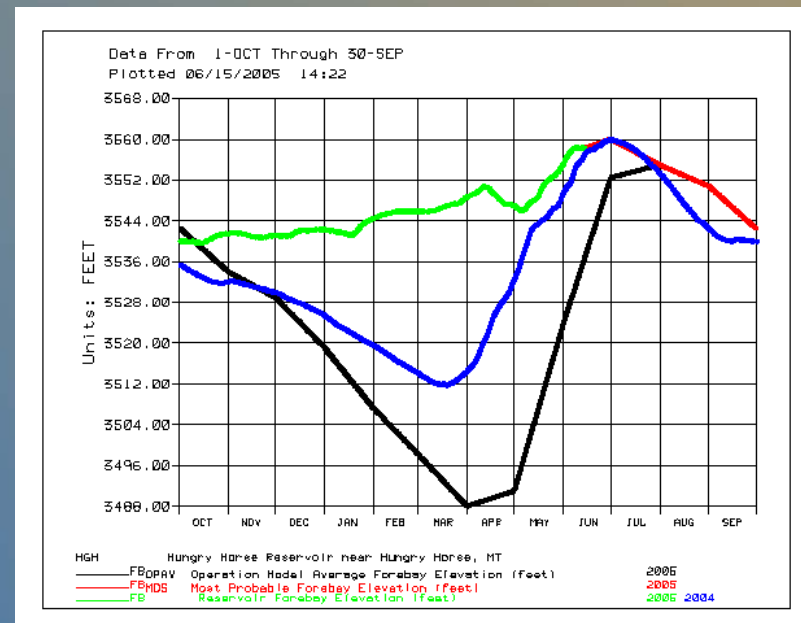
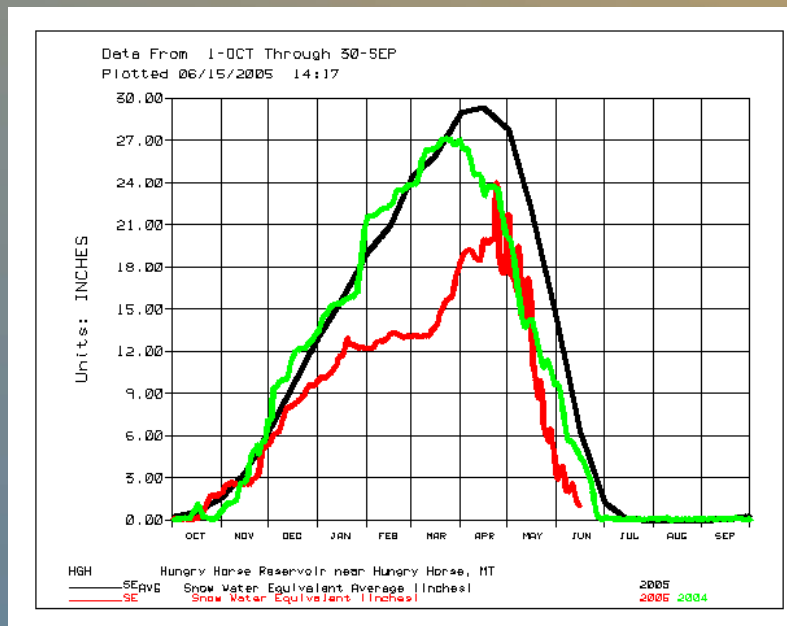
Mountain snowmelt is essentially over

Streamflow into Hungry Horse improved during May

Storage is well above average for this time of year

Currently releasing about 5,000 cfs to river

Hope to fill Hungry Horse by continuing conservative releases



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# Reservoir Conditions for Reclamation Reservoirs

BUREAU OF RECLAMATION  
MONTANA AREA OFFICE  
RESERVOIR CONTENT REPORT  
14-Jun-2005  
ALL CONTENTS IN ACRE-FEET

RESERVOIR NAME	NORMAL FULL POOL	TOTAL CAPACITY	AVERAGE CAPACITY	RESERVOIR CONDITIONS						WATER SUPPLY OUTLOOK						
				ELEVATION (FEET)		CAPACITY (ACRE-FEET)		2005		MTN. SNOW WATER CONTENT (INCHES)				JUNE-JULY RUNOFF JUNE 1st FORECAST		
				2004	2005	2004	2005	% FULL	% OF AVG	2004	2005	AVG	% OF AVG	(KAF)	AVG	% OF AVG
CLARK CANYON	5546.10	174,368	166,731	5511.48	5519.49	44,352	64,926	37	39	2.04	3.07	2.64	116	20	61	32
CANYON FERRY	3797.00	1,891,888	1,750,219	3782.93	3793.45	1,444,239	1,774,932	94	101	2.73	4.03	4.02	100	656	1,083	61
GIBSON	4724.00	96,477	86,843	4723.46	4723.25	95,778	95,506	99	110	0.00	0.20	0.68	30	132	267	50
PISHKUN	4370.00	46,670	44,261	4369.67	4370.21	46,183	47,013	101	106	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
WILLOW CREEK	4142.00	32,300	28,642	4141.99	4142.20	32,286	32,600	101	114	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
LAKE ELWELL	2993.00	967,319	896,415	2984.77	2983.72	829,099	812,595	84	91	2.02	0.80	3.04	26	72	258	28
SHERBURNE	4788.00	67,854	41,498	4764.65	4777.81	34,669	51,893	76	125	8.35	4.55	12.90	35	41	64	64
FRESNO	2575.00	92,880	63,817	2564.77	2569.50	53,587	69,118	74	108	N.A.	N.A.	N.A.	N.A.	24	45	53
NELSON	2221.60	78,951	60,168	2217.03	2213.77	60,605	49,108	62	82	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BIGHORN LAKE	3640.00	1,070,029	940,017	3586.13	3634.43	671,954	1,004,818	94	107	0.27	2.19	3.03	72	666	1,014	66

RECLAMATION

# Summary of Operations of Reclamation Projects

Recent rains have been much welcomed.

Recent rains have dramatically reduced irrigation demands this spring.

Reduced demands leaves more water in the streams, improving inflows to Reclamation reservoirs.

Streamflows improved considerably but many streams remain below normal.

Mountain snowpack has essentially melted out but some high elevation snow remains and may help the streamflows later on this summer.

All reservoirs are above normal, except Clark Canyon (39%), Lake Elwell (91%), & Nelson (82%) Reservoirs.

Hopeful to maintain streamflows below Reclamation Projects at desirable levels for downstream river fisheries, except for the Marias (400 cfs) and Clark Canyon (25-35 cfs for winter).

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